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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,305	10/15/2003	Peter David Berezuk	A01456	7116

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EXAMINER	
BOYKIN, TERRESSA M	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/686,305	**Applicant(s)** BEREZUK ET AL.
	Examiner Terressa M. Boykin	**Art Unit** 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-8* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date *1-9-04*.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5601680 see abstract, and claims in view of USPub 20010025690 .

USP 5601680 discloses a polymeric composite structure having a polymeric shell layer with a finish-side and a non-finish side and a cross-linked thermosetting polymeric backing layer and method of manufacturing thereof is provided. The cross-linked thermosetting polymeric backing layer is simultaneously molded to conform to the shape of and bonded directly to essentially the entire non-finish side of the polymeric shell layer. The method includes forming the polymeric shell having a finish-side and non-finish side into a suitable shape, placing the shell into a mold, and introducing an uncured blended mixture of unsaturated thermosetting polymeric backing material and cross-linking promoter into the mold to force the backing material to directly coat the non-finish side of the shell. Curing the molded thermosetting polymeric backing material at a suitable temperature and sufficient time allows hardening and cross-linking of the thermosetting polymeric material and bonding directly to the non-finish side of the polymeric shell to permit demolding of the composite structure without damage.

Specifically, the polyester backed acrylic composite molded structure. More particularly, it relates to a composite structure having a polyester polymeric backing material applied during a molding process to an acrylic shell for manufacturing of lightweight durable articles such as sanitary fixtures including bathtubs, sinks, shower receptors, lavatories and the like which are lightweight, and resist damage and delamination when subjected to impact, the weight of the user and thermal shock.

The reference discloses a method for preparing a crude bonded composite.

It should be noted that the method as followed is set forth in such a way that the reference would anticipate the claim while remaining within the scope of the specification except for the use of radiation treatment thereon as disclosed herein. However, **US 20010025690** discloses that the use of radiation light beam is common to use for the bonding of the polymer articles in general and including those disclosed therein. The reference states that the process can be used to bond any article of a polymer having photosensitivity-imparting substituents to a second article comprising metal, plasma nitride, silicon, or glass. Any glass may be employed; preferred glasses include those of silicon dioxide, silicon dioxide doped with phosphorus, silicon dioxide doped with boron, and silicon dioxide doped with phosphorus and boron.

The substrate can be bonded to a second substrate and cured Note that in one embodiment of this process, the polymer adhesive is selected from the group consisting of polyamides, polyimides, polyamide-imides, epoxy resins, polyetherimides, polysulfones, polyether sulfones, polyarylene ether ketones, polystyrenes, chloromethylated polyarylene ether ketones, acryloylated polyarylene ether ketones, and mixtures thereof.

The adhesion promoter is applied to at least one of the two articles, followed by exposing the two articles and the adhesion promoter to radiation. Suitable radiation includes heat, electron beam radiation, light, such as ultraviolet light, or the like, with ultraviolet light being the preferred form of radiation. Exposure to radiation is believed to initiate crosslinking or chain extension of the polymer so that coupling occurs between the photosensitivity-imparting groups on the polymer and the active groups on the adhesion promoter, thereby forming a strong interfacial bond. For example, the process of the present invention can be used to bond together elements in microelectronic mechanical devices, such as thermal ink jet printheads. Thus, it would have been obvious to one of ordinary skill in the art to apply the radiation treatment to bond the cured bonding of the composite since such is commonly practiced in the art as demonstrated by **US 20010025690.**

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov <http://www.uspto.gov>), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is **(571-272-1700).**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

Examiner Terressa Boykin
Primary Examiner
Art Unit 1711